

CLAIM AMENDMENTS

1-4. (canceled)

5. (currently amended): A controlled release system comprising a temperature sensitive polymer ~~[[of]]~~ having a lower critical solution temperature (LCST) that changes during incubation in an aqueous medium, ~~which polymer is~~ wherein said temperature sensitive polymer consists of

(a) ~~a homo- or interpolymer~~ homopolymer formed from monomers consisting of [[an]] N-(2-hydroxypropyl) (N-(2-hydroxypropyl)-methacrylamide lactate) methyl acrylamide (lactate)_n where n is 1-10 and n is the same in the monomers that constitute said homopolymer, [[and]] said homopolymer coupled to a hydrophilic block; or

(b) an interpolymer formed from monomers consisting of N-(2-hydroxypropyl) methyl acrylamide (lactate)_n where n is 1-10 and n varies in the monomers that constitute the interpolymer, said interpolymer optionally coupled to a hydrophilic block; and
an active ingredient.

6. (canceled)

7. (currently amended): The controlled release system of ~~claim 6~~ claim 5, wherein the hydrophilic block comprises poly(ethyleneglycol).

8. (currently amended): The controlled release system of ~~claim 5 or 6~~ claim 7, wherein the system is in the form of a hydrogel or a micelle.

9. (currently amended): The controlled release system of ~~claim 8, wherein the~~ claim 5 which is in the form of a hydrogel is an ABA block copolymer, wherein block A is the ~~or micelle and wherein said temperature sensitive polymer of claim 5 and block B is a hydrophilic polymer contains said interpolymer wherein the value of n is varied.~~

10. (currently amended): The controlled release system of claim 9, wherein ~~block B is PEG~~ the interpolymer is coupled to a hydrophilic block.

11. (currently amended): ~~A targeting drug composition, comprising a drug and particles of a~~ The controlled release system according to claim 5, wherein the particles have an average diameter of less than 100 nm of claim 10, wherein the hydrophilic block comprises poly(ethyleneglycol).

12. (currently amended): ~~The targeting drug composition of claim 9~~ controlled release system of claim 5 further comprising a homing device.

13. (new): The controlled release system of claim 9 further comprising a homing device.